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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO.          | CONFIRMATION NO.       |
|---|-------------|-----------------------|------------------------------|------------------------|
| 10/664,260  | 09/17/2003  | Patsy Ann Krautkramcr | 19167                        | 3401                   |
| 23556 7590 08/10/2007<br>KIMBERLY-CLARK WORLDWIDE, INC.<br>Catherine E. Wolf<br>401 NORTH LAKE STREET<br>NEENAH, WI 54956 |             |                       | EXAMINER<br>HAND, MELANIE JO |                        |
|   |             |                       | ART UNIT<br>3761             | PAPER NUMBER           |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/664,260

Applicant(s)

KRAUTKRAMER ET AL.

Examiner

Melanie J. Hand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed May 11, 2007 have been fully considered but they are not persuasive.

With respect to applicant's argument regarding claim 1: Applicant argues that it would not have been obvious to one of ordinary skill in the art to modify the article of Burnes so as to have an intake layer that is longitudinally offset toward an article region delimited by the first half of a shaping layer. Applicant is referred to Page 3, paragraph 2 of the previous Office action mailed February 17, 2007 where this argument is responded to in detail with a teaching by Bruce which states that sanitary napkin styles are dictated by the style of panty preferred by the user, wherein a thong is a widely known panty style preferred by users. The Office action continues on to cite further teachings of Bruce explaining that absorbent article for thong undergarments are known in the art and a necessary requirement of creating an absorbent article for a thong undergarment is that the concentration of absorbent material must be shifted toward the front of the article, e.g. the absorbent material of an intake layer. Thus, by fairly suggesting an asymmetric absorbent article suitable for use in a thong, the combined teaching of Burnes and Bruce fairly suggest longitudinally offsetting an intake layer or any other absorbent layer toward a front half region of the article to make the article functional in a thong panty.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burnes et al (U.S. Patent No. 6,608,236) in view of Bruce et al (U.S. Patent Application Publication No. 2003/0097109).

With respect to **claim 1**: Burnes teaches an absorbent feminine care article having a longitudinal direction, a lateral direction, first and second longitudinally opposed end portions, and an intermediate portion located between said end portions, said article comprising: a liquid-permeable cover in the form of a body-side liner (Col. 23, lines 15-18); a baffle (Col. 23, lines 15-18); and an absorbent body in the form of a distribution/retention layer sandwiched between the cover and baffle (Col. 23, lines 15-18); wherein said absorbent body includes an intake layer 6 and a shaping layer 9 (Fig. 14, Col. 13, lines 43, 64-66); said shaping layer 9 is positioned between said cover and said baffle, and has a longitudinal shaping-layer length and a lateral shaping-layer width (Fig. 14); said intake layer 6 is positioned between said cover and said shaping layer 9 and has a longitudinal intake-layer length and a lateral intake-layer width (Fig. 14, Col. 13, lines 43, 64-66); said intake layer 6 (referred to as the "top layer in the Table in Col. 14) has an area extent which is smaller than an area extent of said shaping layer 9 (referred to as the "bottom layer" in the Table in Col. 14) (Col. 14, Table); said shaping layer 9 has a first longitudinal half-length from the terminal edge of one lobe to a lateral centerline, a second longitudinal half-length from the terminal edge of the second lobe to a lateral centerline, a

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narrow-section, a wide-section, and a transition-section; said wide-section of the shaping layer 9 includes a maximum lateral width of the shaping layer (as seen in Fig. 14 and as evidence by measurements in the Table in Col. 14) and includes a terminal end edge located in said first half-length of the shaping layer 9, that is the terminal end edge of the first lobe.

Burnes does not teach a longitudinally asymmetric shaping layer 9. Bruce teaches that longitudinally asymmetric (Fig. 7) absorbent articles designed specifically for use in thong undergarments are known in the art and provides known positioning and shaping of the articles for such thong undergarments. Bruce also teaches that "sanitary napkin styles have shapes dictated not by the necessity to place maximum amounts of absorbency in the center of the napkin but rather by the style of panty preferred by the user." ('109, Fig. 7, ¶¶ 0005,0033) As can clearly be seen in Fig. 7, which depicts the position of a sanitary napkin in a known U.S. thong, the center of the crotch is at the position of 0 mm on the grid, which is the target insult region, and is located in the wider, front section of the napkin, whose centerline in this grid is at the 20 mm position in the back of the thong. Thus it would be obvious to one of ordinary skill in the art to modify the article of Burnes for use in a known undergarment style by shifting any or all of the absorbency layers (including the intake layer 6) forward such that the intake layer is longitudinally offset toward an article region which is delimited by said first half-length of the shaping layer 9. Thus, by modifying the garment of Burnes to fit a well-known thong undergarment style in the back of the garment, said transition-section is thus located between said narrow and wide sections of the modified shaping layer 9, the transition-section having lateral side edges which interconnect lateral side edges of the narrow-section of the shaping layer with corresponding lateral side edges of the wide-section of the shaping layer; said narrow-section of the modified shaping layer 9 would include a terminal end edge located in

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said second half-length of the shaping layer; and said intake layer would be longitudinally offset toward an article region which is delimited by said first half-length of the shaping layer.

With respect to **claim 2**: The intake-layer length is smaller than said shaping-layer length, and said intake-layer width is smaller than said shaping-layer width. ('236, Col. 14, Table)

With respect to **claim 3**: The narrow-section of the shaping layer substantially avoids extending into an article region that is delimited by said first longitudinal half-length of the shaping layer. The narrow section resides in the second half-length and is separated from the first half-length by the transition section and thus physically cannot extend into the article region that is delimited by said first longitudinal half-length of the shaping layer.

With respect to **claim 4**: The intake layer of the combined teaching of Burnes and Bruce substantially avoids extending into a region of the article that is delimited by said narrow-section of the shaping layer.

With respect to **claim 5**: At least about 55 % of the intake layer length of the combined teaching of Burnes and Bruce is located in an article region that is delimited by the first half-length of the shaping layer. ('109, Fig. 7) The center of the intake layer of the combined teaching is aligned with the center of the article (as is taught by Burnes in Fig. 14), and the center of the article is located in the first longitudinal half-length of the thong taught by Bruce in Fig. 7.

With respect to **claim 6**: At least about 55 % of the intake layer length of the combined teaching of Burnes and Bruce is located in an article region that is delimited by the first half-length of the

shaping layer, therefore at least about 55 % of the area of the intake layer is located in an article region that is delimited by the first half-length of the shaping layer.

With respect to **claim 7**: An inboard boundary of said narrow-section of the shaping layer 9 taught by Burnes is delimited by an upper-limit lateral dimension of not more than about 62 mm, as the article taught by Burnes at the transition section (i.e. the center) is 60 mm ('236, Col. 14, Table), and the narrow section does not extend beyond the transition section and is smaller in width than said transition section.

With respect to **claim 8**: An inboard boundary of said narrow-section of the shaping layer 9 taught by Burnes is delimited by an upper-limit lateral dimension of not more than about 98% of said maximum lateral width of the shaping layer, or 68.6 mm. ('236, Col. 14, Table)

With respect to **claim 9**: An inboard boundary of said wide-section of the shaping layer 9 taught by Burnes is delimited by a lower-limit lateral dimension of 70 mm ('236, Col. 14, Table), which is not less than about 40 mm.

With respect to **claim 10**: An inboard boundary said wide-section of the shaping layer 9 taught by Burnes is delimited by a lower-limit lateral dimension of 70 mm ('236, Col. 14, Table), which is not less than about 60 % of said maximum lateral width, or 42 mm, of the shaping layer 9.

With respect to **claim 11**: The transition-section of the shaping layer of the combined teaching of Burnes and Bruce extends between a minimum lateral dimension of said wide-section of the shaping layer, and a maximum lateral dimension of said narrow-section of the shaping layer

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(Fig. 14 taught by Burnes and Fig. 7 taught by Bruce); the shaping layer has a lower-limit lateral dimension; and the lower-limit lateral dimension of the shaping layer is located in the second half-length of the shaping layer. (Fig. 14 taught by Burnes and Fig. 7 taught by Bruce)

With respect to **claim 12**: The transition-section of the shaping layer of the combined teaching of Burnes and Bruce has tapering side edges that are substantially linear.

With respect to **claim 13**: The transition-section of the shaping layer taught by Burnes has tapering side edges that are curvilinear. ('236, Fig. 14)

With respect to **claim 14**: The transition-section of the shaping layer taught by Burnes has tapering side edges, and at least a portion of each side edge is substantially outwardly concave. ('236, Fig. 14)

With respect to **claim 15**: The intake layer 6 taught by Burnes has an intake-layer area, said shaping layer 9 taught by Burnes has a shaping-layer area, and the entirety of said intake-layer area lies within an article region that is delimited by said shaping layer area, owing to the superposed relationship of the intake layer with respect to the shaping layer, and the larger size of the shaping layer. ('236, Fig. 14, Col. 13, lines 43, 64-66, Col. 14, Table)

With respect to **claim 16**: A terminal end edge of said intake layer 6 is inwardly spaced from said terminal end edge of the narrow-section of the shaping layer 9 by a narrow-end distance of 33 mm, which satisfies the limitation of at least a minimum of about 30 mm. ('236, Fig. 14, Col. 13, lines 43, 64-66, Col. 14, Table)



With respect to **claim 17**: The narrow-section of the shaping layer of the combined teaching of Burnes and Bruce includes a pair of laterally opposed side edges that are substantially parallel to each other. ('109, Fig. 7)

With respect to **claim 18**: The shaping layer 9 taught by Burnes includes at least about 5 wt% superabsorbent material and not more than about 75 wt% superabsorbent material, based upon Burnes' teaching that the retention layer contains 80-90% coform material, which can contain superabsorbent. The interpretation of "can contain" is interpreted herein as meaning that the entire 80-90% of the coform is not absorbent material. Burnes teaches by reference to U.S. Patent No. 4,818,464 to Lau et al, that the superabsorbent material is an additive in the coform process, thus the shaping layer taught by Burnes is considered herein to contain between 5-75% superabsorbent material.

With respect to **claim 19**: The shaping layer 9 taught by Burnes has a shaping-layer basis weight of 175 gsm, or at least about 100 g/m<sup>2</sup> and not more than about 400 g/m<sup>2</sup> ('236, Col. 13, Table 1); a shaping-layer density of between 0.03-0.1 g/cc, which overlaps the range of at least about 0.06 g/cm<sup>3</sup> and not more than about 0.3 g/cm<sup>3</sup> of a substantially identical menses simulant to claimed simulant A, a shaping-layer total absorbent saturation capacity of 2.3-3.8 g/cc ('236, Col. 15, Table) and a shaping-layer area of about 127 cm<sup>2</sup>, or at least about 100 cm<sup>2</sup> and not more than about 150 cm<sup>2</sup> ('236, Col. 14, Table) ; and said intake layer has an intake-layer density (0.02-0.06 g/cc) which is less than the shaping-layer density (0.03-0.1 g/cc), has an intake-layer total absorbent capacity (1.36-1.5 g) which is less than the shaping-layer total

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absorbent capacity (2.65-3.64 g), and has an intake-layer area which is less than the shaping-layer area. (Col. 11, lines 48-50, Col. 12, lines 7-11, Col. 14, Table, Col. 15, Table)

Burnes does not teach a shaping layer absorbent capacity of at least about 5 grams and not more than about 30 grams of menses simulant A. However applicant has not established criticality for such an absorbent capacity. Since the absorbent capacity of the article of Burnes is clearly a result-effective variable, it would be obvious to one of ordinary skill in the art to modify the absorbent capacity to the shaping layer of the combined teaching of Burnes and Bruce so as to be at least about 5 grams. It has been held that where general conditions of claim are disclosed in prior art, it is not inventive to discover optimum or workable ranges by routine experimentation. See *In re Aller, Lacey and Hall* (105 USPQ 233, CCPA, 1955).

With respect to **claim 20**: The shaping layer 9 taught by Burnes includes a stabilized airlaid, fibrous material having binder fiber therein. ('236, Col. 12, lines 14-17)

With respect to **claim 21**: The intake layer 6 taught by Burnes includes a stabilized airlaid, fibrous material having binder fiber therein. ('236, Col. 11, lines 55-58)

With respect to **claim 22**: The article taught by the combined teaching of Burnes and Bruce does not further include asymmetric narrow-section-wings, however Burnes does teach that they are a known improvement in the art for enhanced leakage protection, (Col. 1, lines 28-31) therefore it would be obvious to one of ordinary skill in the art to modify the article of the combined teaching of Burnes and Bruce so as to contain asymmetric wings in the narrow section to enhance leakage protection as taught by Burnes.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
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August 3, 2007

A handwritten signature in black ink, appearing to read 'Tatyana', written in a cursive style.

**TATYANA ZALUKAEVA**  
**SUPERVISORY PRIMARY EXAMINER**